New U.S. National Stage Application based on International Application PCT/GB2004/000064

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IN THE CLAIMS

Please amend claims 1, 4, 5,7, 9, 12, 14-19 and 24 as follows:

1. (Currently Amended) A process for preparing a sulfinyl compound of formula (I), or a pharmaceutically acceptable salt, hydrate or solvate thereof,

$$R_1$$
 R_2
 R_3
 O
 N
 R_4
 (I)

which process comprises oxidation of a sulfide compound of formula (II)

$$R_1$$
 R_2
 R_3
 N
 R_4
(II)

wherein in both formulae (I) and (II) R_1 and R_3 are selected from the group consisting of hydrogen, methyl or C_{1-4} alkoxy, R_2 is selected from the group consisting of substituted or unsubstituted C_{1-4} alkoxy and R_4 is selected from the group consisting of hydrogen or substituted or unsubstituted C_{1-4} alkoxy;

characterised characterized in that a solution of an alkali or alkali earth metal hydroxide is added to a suspension or solution of a sulfide compound of formula (II), and thereafter there is added thereto an oxidising oxidizing agent comprising an aqueous alkali or alkali earth metal hypohalite solution, having a concentration in the range of 2 to 5%, such that a sulfide compound of formula (II) is oxidized oxidized to a sulfinyl compound of formula (I) in the presence of the alkali or alkali earth metal hydroxide, and optionally converting a sulfinyl compound of formula (I) to a pharmaceutically acceptable salt, hydrate or solvate thereof.

- 2. (Original) A process according to claim 1, wherein a compound of formula (II) is reacted with an aqueous hypohalite solution in the presence of a catalyst selected from the group consisting of pyridine, di-isopropyl ethyl amine and N,N-dimethyl amino pyridine.
- 3. (Currently Amended) A process according to claim 1 [[or 2]], which comprises dissolving or suspending a compound of formula (II) in a solvent selected from the group consisting of water, lower alkyl alcohols, esters, ethers and chlorinated solvents, or a mixture of two or more of these solvents.

- 4. (Original) A process according to claim 3, wherein said solvent is selected from the group consisting of water, methanol, ethanol, isopropanol, di-isopropyl ether, dichloromethane, acetonitrile and ethyl acetate, or a mixture of two or more of these solvents.
- 5. (Currently Amended) A process according to any of claims 1 to 4 claim 1, which is carried out at a temperature in the range of -30 to 50°C.
- 6. (Original) A process according to claim 5, which is carried out at a temperature in the range of 0 to 30°C.
- 7. (Currently Amended) A process according to any of claims 1 to 6 claim 1, wherein said alkali metal or alkali earth metal hypohalite is selected from the group consisting of sodium hypochlorite, sodium hypobromite and calcium hypochlorite.
- 8. (Original) A process according to claim 7, wherein said aqueous hypohalite solution comprises sodium hypochlorite.
- 9. (Currently Amended) A process according to any of claims 1 to 8 claim 1, wherein a pH in the range of 9 to 12 is obtained at least during said oxidation.

- 10. (Currently Amended) A process according to any of claims 1 to 9 claim 1, wherein in formula (I) R_1 represents methyl, R_2 represents trifluoroethoxy, R_3 represents hydrogen and R_4 represents hydrogen.
- (Original) A process according to any of claims 1 to 9 claim 1, wherein in formula
 (I) R₁ represents methyl, R₂ represents methoxy, R₃ represents methyl and R₄ represents methoxy.
- 12. (Currently Amended) A process according to any of claims 1 to 9 claim 1, wherein in formula (I) R_1 represents methoxy, R_2 represents methoxy, R_3 represents hydrogen and R_4 represents difluoromethoxy.
- 13. (Currently Amended) A process according to any of claims 1 to 9 claim 1, wherein in formula (I) R₁ represents methyl, R₂ represents OCH₂CH₂CH₂OMe, R₃ represents hydrogen and R₄ represents hydrogen.
- 14. (Original) Lansoprazole prepared according to claim 10, substantially free of oxidation contamination by products.
- 15. (Original) Omeprazole prepared according to claim 11, substantially free of oxidation contamination by products.

- 16. (Original) Pantoprazole prepared according to claim 12, substantially free of oxidation contamination by products.
- 17. (Original) Rabeprazole prepared according to claim 13, substantially free of oxidation contamination by products.
- 18. (Currently Amended) A pharmaceutical composition comprising a sulfinyl compound of formula (I)

$$R_1$$
 R_2
 R_3
 O
 N
 R_4
 (I)

wherein R_1 and R_3 are selected from the group consisting of hydrogen, methyl or C_{14} alkoxy, R_2 is selected from the group consisting of substituted or unsubstituted C_{14} alkoxy and R_4 is selected from the group consisting of hydrogen or substituted or unsubstituted C_{14} alkoxy; prepared according to any of claims 1 to 13 claim 1, together with a pharmaceutically acceptable carrier or excipient therefor.

- 19. (Original) A pharmaceutical composition comprising lansoprazole according to claim14, together with a pharmaceutically acceptable carrier or excipient therefor.
- 20. (Original) A pharmaceutical composition comprising omeprazole according to claim 15, together with a pharmaceutically acceptable carrier or excipient therefor.
- 21. (Original) A pharmaceutical composition comprising pantoprazole according to claim16, together with a pharmaceutically acceptable carrier or excipient therefor.
- 22. (Original) A pharmaceutical composition comprising rabeprazole according to claim17, together with a pharmaceutically acceptable carrier or excipient therefor.
 - 23. (Original) For use in therapy, lansoprazole according to claim 14.
 - 24. (Original) For use in therapy, omeprazole according to claim 15.
 - 25. (Original) For use in therapy, pantoprazole according to claim 16.
 - 26. (Original) For use in therapy, rabeprazole according to claim 17.

- 27. (Original) For use in the manufacture of a medicament for the treatment of gastric ulcers and related conditions, lansoprazole according to claim 14.
- 28. (Original) For use in the manufacture of a medicament for the treatment of gastric ulcers and related conditions, omeprazole according to claim 15.
- 29. (Original) For use in the manufacture of a medicament for the treatment of gastric ulcers and related conditions, pantoprazole according to claim 16.
- 30. (Original) For use in the manufacture of a medicament for the treatment of gastric ulcers and related conditions, rabeprazole according to claim 17.
- 31. (Original) A method of treating gastric ulcers and related conditions, which comprises administering to a patient in need of such treatment lansoprazole according to claim 14.
- 32. (Original) A method of treating gastric ulcers and related conditions, which comprises administering to a patient in need of such treatment omeprazole according to claim 14.
- 33. (Original) A method of treating gastric ulcers and related conditions, which comprises administering to a patient in need of such treatment pantoprazole according to claim 16.

34. (Original) A method of treating gastric ulcers and related conditions, which comprises administering to a patient in need of such treatment rabeprazole according to claim 17.